Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-20. (Cancelled)

21. (New) A method comprising:

introducing particles of tetrabasic lead sulfate into a paste mix to form a paste material, the particles having a generally spherical shape and an average diameter of less than approximately 2.5 micrometers; and

providing the paste material on a battery grid.

22. (New) The method of Claim 21, wherein the particles have an average diameter of less than approximately 2 micrometers.

23. (New) The method of Claim 21, wherein the particles have an average diameter of between approximately 1 and 2 micrometers.

24. (New) The method of Claim 21, further comprising curing the battery grid and paste material at a temperature of less than approximately 48 degrees Celsius.

25. (New) The method of Claim 24, wherein the curing step is performed at a humidity level of approximately 95%.

26. (New) The method of Claim 24, wherein the curing step is performed at a temperature of between approximately 46 and 48 degrees Celsius.

27. (New) The method of Claim 24, wherein the cured paste material includes tetrabasic lead sulfate crystals having a thickness of between approximately 2 and 5 micrometers.

28. (New) The method of Claim 21, wherein the step of introducing particles of tetrabasic lead sulfate into a paste mix comprises adding the particles of tetrabasic lead sulfate at a loading level of between approximately 0.1 and 10.0 weight percent to the paste mix.

29. (New) The method of Claim 21, further comprising milling tetrabasic lead sulfate to form the particles of tetrabasic lead sulfate before introducing the particles into the paste mix.

30. (New) The method of Claim 29, wherein the step of milling tetrabasic lead sulfate utilizes a jet milling process.

31. (New) A method of making a plate for a battery comprising:

mixing particles of tetrabasic lead sulfate having an average spherical particle diameter of less than approximately 2 micrometers with leady oxide to form a paste; and

coating at least a portion of a battery grid with the paste.

32. (New) The method of Claim 31, further comprising heating the battery grid and paste at a temperature of less than approximately 48 degrees Celsius to produce a battery plate having a cured paste thereon.

33. (New) The method of Claim 31, wherein the particles have an average spherical particle diameter of approximately 1 micrometer.

34. (New) The method of Claim 31, wherein the mixing step comprises adding the tetrabasic lead sulfate particles at a loading level of approximately 1 weight percent to the leady oxide.

35. (New) The method of Claim 31, wherein the mixing step is performed at a temperature of less than approximately 60 degrees Celsius.

36. (New) A method of making a battery comprising:

adding tetrabasic lead sulfate seed crystals having an average spherical particle diameter of less than approximately 2.5 micrometers to leady oxide to form a paste material;

coating at least a portion of a battery grid with the paste material;

curing the battery grid and paste material at a temperature of less than approximately 48 degrees Celsius to form a battery plate having a cured paste thereon;

providing the battery plate in a container to produce a battery; and

charging the battery.

37. (New) The method of Claim 36, wherein the seed crystals have an average spherical particle diameter of between approximately 1 and 2 micrometers.

38. (New) The method of Claim 36, wherein the cured paste includes tetrabasic lead sulfate crystals having a thickness of between approximately 2 and 5 micrometers.

39. (New) The method of Claim 38, wherein the cured paste includes between 50 and 60 weight percent tetrabasic lead sulfate crystals after the curing step.

40. (New) The method of Claim 36, wherein the curing step is performed at a temperature of between approximately 46 and 48 degrees Celsius.

41. (New) The method of Claim 36, wherein the step of adding tetrabasic lead sulfate seed crystals comprises adding approximately 1 weight percent of the seed crystals to the leady oxide.

42. (New) A battery paste material for use in the production of lead-acid batteries comprising particles of tetrabasic lead sulfate having an average spherical particle diameter of less than approximately 2.5 micrometers.

43. (New) The battery paste material of Claim 42, wherein the particles have an average spherical particle diameter of between approximately 1 and 2 micrometers.

44. (New) The battery paste material of Claim 42, wherein the paste material further comprises leady oxide.

45. (New) The battery paste material of Claim 42, wherein the paste material is configured such that after curing at a temperature less than approximately 48 degrees Celsius, the resulting battery paste will comprise tetrabasic lead sulfate crystals having a thickness of between approximately 2 and 5 micrometers.